

A LIST OF FRESHWATER ALGAE FROM
NEW BRUNSWICK

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That very little has been done with the freshwater algae of New Brunswick is common knowledge. Accordingly, while home on vacation, one of the authors managed to make a fairly representative collection of freshwater algae from the vicinity of Grand Falls, New Brunswick. The collections were made during the period extending from the latter part of June to mid-August, 1947—all within an easy walking distance of Grand Falls. The collection numbers listed below are those of Herbert Habeeb. On several occasions Herbert Habeeb was accompanied in the field by the Grand Falls High School Principal, Mr. John Caldwell, an ardent student of the microscope.

The determinations were all made by Francis Drouet. The absence of such genera as *Mougeotia* and *Oedogonium* from the list does not indicate that they are absent from the local flora, but that they were not found in fruit or ripe fruit—and hence were indeterminable. The diatom, desmid, and *Chara* specimens remain to be determined, and it is hoped that they will be included in a future list of additional species.

Complete sets of the specimens are in the possession of the Cryptogamic Herbarium, Chicago Natural History Museum, and in the herbarium of Herbert Habeeb at Grand Falls.

ANACYSTIS RUPESTRIS (Lyngb.) Dr. & Daily. COLLECTION NUMBERS: 10063. 10206 in part. HABITATS: Wet ground, brookside. Amidst moss on canyon wall.

ANABAENA INAEQUALIS B. & F. 10081. Dried-up water course in a pasture with sterile *Oedogonium*.

AMPHITRIX JANTHINA B. & F. 10159 in part. 10310 in part. Scraped off boulder in stream, and off wet ledge.

APIOCYSTIS BRAUNIANA Näg. 10305. With sterile *Oedogonium* sp. in a rock-ledge pool.

BATRACHOSPERMUM MONILIFORME Roth. 10028. 10036. Anchored in cool moving water.

BOTRYDIUM GRANULATUM (L.) Grev. 10161 in part. 10182. 10186 in part. Baseball diamond. Damp mud of road rut.

CALOTHRIX JULIANA B. & F. 10034. Crust covering clinkers in brook.

CALOTHRIX PARIETINA B. & F. 10033 in part. 10143 in part. 10145 in part. 10152. 10302. On rocks in brook. Covering usually xerophytic ground. On bottom of dry rock-ledge pool.

CHAMAESIPHON POLONICUS (Rostaf.) Hansg. 10159 in part. Scraped off boulder in stream.

CHAETOPHORA ELEGANS (Roth) Ag. 10024. Gelatinous spots on rocks in brooklet.

CHLOROCOCCUM HUMICOLA (Kütz.) Rabenh. 10127. On dead wood in shade.

CHLOROTYLUM CATARACTARUM Kütz. 10033 in part. 10153 in part. 10222. Crust on rocks in brooklets.

CLADOPHORA CRISPATA (Roth) Kütz. 10050. 10061. 10151. 10183 in part. 10209. 10213. 10308. 10313 in part. Amidst stones and rocks in shallow parts of brooklets. Attached to sides of rock-ledge pools.

CLADOPHORA GLOMERATA (L.) Kütz. 10270. Attached to ledge in a rapid-flowing streamlet.

CYLINDROSPERMUM LICHENIFORME B. & F. 10118. 10124. On ground. Shaded lawn.

CYLINDROSPERMUM MAJUS B. & F. 10170. On damp mud in a swamp.

CYLINDROSPERMUM MUSCICOLA B. & F. 10298. On damp lawn.

DICHOTHRIX BAUERIANA B. & F. 10261. Wet ledge at edge of rock pool.

DICHOTHRIX GYPSOPHILA B. & F. 10148 in part. 10149. 10265 in part. 10267 in part. In trickling water on wet ledges.

DRAPARNALDIA PLUMOSA (Vauch.) Ag. 10037. 10134. 10225 in part. On rocks in moving water. In a water barrel at a spring.

FISCHERELLA AMBIGUA (B. & F.) Gom. 10162. Exposed soil of ball diamond.

GLOEOCAPSA ALPICOLA (Lyngb.) Born. 10057. 10283. 10314 in part. On blackish-colored wet to damp ledges, in shade.

Gloeocapsa membranina (Menegh.) Drouet & W. A. Daily, **comb. nov.** *Pleurococcus membraninus* Menegh.,¹ Mem. R. Accad. Torino, ser. 2, 5 (Sci. Fis. e Math.): 34. 1843. *Protococcus membraninus* Menegh. in Kütz., Tab. Phyc. 1: 5. 1846. *P. rufescens* Kütz., ibid. p. 9. 1846. *Pleurococcus rufescens* Bréb. in Kütz., loc. cit. 1846. *Chroococcus membraninus* Näg., Gatt.

¹ Duplicate specimens of the original material of this species collected by Meneghini in the Euganean springs at Abano near Padova were studied in the collections of the Rijksherbarium at Leiden, the Naturhistoriska Riksmuseet at Stockholm, and the Herbarium of the University of California at Berkeley. They contain the same species as treated by Daily in Amer. Midl. Nat. 27: 642 (1942) and by Drouet & Daily in Field Mus. Bot. Ser. 20: 148, footnote 2 (1943) under the name *Chroococcus rufescens* (Kütz.) Näg.—F. Drouet and W. A. Daily.

einzel. Alg., p. 46. 1849. *C. rufescens* Näg., loc. cit. 1849.
COLLECTION NUMBER: 10264 in part. In trickling water on ledge.

GLOEOCAPSA TURGIDA (Kütz.) Hollerb. 10208 in part. In scum on surface of shallow water, brookside.

GLOEOCYSTIS CONFLUENS (Kütz.) Richt. 10188. 10192. 10194. 10303. 10304. Surface of ledge in the shade. On usually xerophytic ground. In rock-ledge pool.

HYDROCOLEUM HOMOEOTRICHUM Gom. 10136 in part. 10256 (the phormidioid state). 10267 in part. Riverside ledge at waterline. On rocks in streams. In trickling water on ledge.

LYNGBYA OCHRACEA Gom. 10287. 10220. 10174. 10169. 10001. In cool slow water. In a swamp seepage.

MICROCOLEUS ACUTISSIMUS Gardn. 10106 in part. Sandy shore of the St. John River.

MICROCOLEUS PALUDOSUS Gom. 10104. 10105. 10106 in part. 10107. In ledge cracks and on sandy shore of the St. John River.

MICROCOLEUS VAGINATUS Gom. 10109. 10122. 10123 in part. 10132 (the phormidioid state). 10145 in part. 10164 (juvenile plants). 10167 (young plants and moss protonema). 10175. 10176. 10178 (young plants). 10185. 10190. 10228. 10275. 10297. 10299. 10321. On soil between buildings. On ground in shade. In mud puddles. In a ditch. On old roadways and in pathways. On usually xerophytic ground.

MICROSPORA STAGNORUM (Kütz.) Lagerh. 10243. With sterile *Bulbochaete* sp. and other *Algae* near the shore of a river.

MICROSPORA WITTRICKII (Wille) Lagerh. 10086. 10306. In rock-ledge pools.

NOSTOC COMMUNE B. & F. 10054. 10065 (parasitized plants). 10316 in part? Amidst moss on canyon wall. Off damp ledge.

NOSTOC MICROSCOPICUM B. & F. 10049. 10314 in part. 10317. 10319. 10322. 10324 in part. Damp canyon walls.

NOSTOC MUSCORUM B. & F.? 10325. On moss covering relatively dry ledge.

OOCYSTIS SOLITARIA Wittr. 10264 in part. 10273 in part. In trickling water on ledge. In rock-ledge pool.

OSCILLATORIA FORMOSA Gom. 10171. In water of a swamp.

OSCILLATORIA TENUIS Gom. 10113 in part. 10142 (trichomes of various diameters). 10290. 10291. 10289 in part. Covering wet mud. On bottom in cool slow water.

OSCILLATORIA TENUIS Gom. var. NATANS Gom. 10183 in part. In a rock ledge pool with other *Algae*.

PHORMIDIUM AUTUMNALE Gom. 10093. 10156. 10263. In a springlet on a rock ledge. Film on a rock in a streamlet. On a wet ledge at the edge of a rock-ledge pool.

PHORMIDIUM FAVOSUM Gom. 10232. 10249. 10253. 10255. Covering other *Algae* in slow-moving water.

PHORMIDIUM INCRUSTATUM Gom. 10153 in part. 10309. Off rocks in stream. In trickling water on a ledge.

PHORMIDIUM PAPYRACEUM Gom. 10094. Scraped off ledges at brookside.

PHORMIDIUM SETCHELLIANUM Gom. 10012. 10245. In a brown gelatinous layer on a rock in moving water. With sterile *Spirogyra* sp. in shallow water.

PHORMIDIUM TENUE Gom. 10237. On *Chara* sp. in slow-moving water.

PHORMIDIUM UNCINATUM Gom. 10296. From shallow muddy part of a brooklet.

PLECTONEMA NOSTOCORUM Gom. 10051. 10064. 10206 in part. In a rock-ledge pool. In a moist limy deposit on mosses of canyon wall. Wet ground, brookside.

PLECTONEMA PURPUREUM Gom. 10241. On *Batrachospermum* sp. in fast moving water.

PROTOCOCCUS VIRIDIS Ag. 10120. 10189. On tree trunks in the shade.

PROTOSIPHON BOTRYOIDES (Kütz.) Klebs. 10160. 10161 in part. On the exposed soil of the ball diamond.

SCENEDESMUS ARMATUS (Chod.) G. M. Smith. 10273 in part. In a rock-ledge pool.

SCENEDESMUS DIMORPHUS (Turp.) Kütz. 10205. On rocks in a ledge pool.

SCHIZOTHRIX FRIESII Gom. 10276 in part. 10277. 10281. In ledge cracks and on mosses of damp ledges.

SCHIZOTHRIX HEUFLERI Gom. 10230. Purple coloring on a vertical sand bank.

SCHIZOTHRIX LACUSTRIS Gom. 10148 in part. 10218. On a rock in a brooklet. On a ledge with trickling water.

SCHIZOTHRIX STRICKLANDII Dr. 10131 in part. 10143 in part. 10223. Between rocks and stones in a path. On usually xerophytic ground.

SCYTONEMA FIGURATUM B. & F. 10196. 10272. 10323. 10314 in part? On moss of canyon wall. On damp ledge and shaded canyon wall.

SCYTONEMA GUYANENSE B. & F. 10320. On ground beneath an overhanging ledge.

SCYTONEMA HOFMANNII B. & F. 10067. 10324 in part. On mosses and damp canyon wall.

SCYTONEMA MYOCHROUS B. & F. 10066. 10150. 10265 in part. 10276 in part. In cracks and on moss of damp ledge. Scraped off damp ledge.

SCYTONEMA OCELLATUM B. & F. 10328. 10131 in part. On canyon wall. Between rocks and stones in a pathway.

SPHAERELLA LACUSTRIS (Girod) Wittr. 10056. 10279. Coloring red the bottom and sides of a rock-ledge pool. Pink color scraped off a rock ledge.

SPIROGYRA PORTICALIS (Müll.) Cleve? 10133. In shallow part of a spring.

SPIROGYRA VARIANS (Hass.) Kütz. 10029. In a brooklet.

STICHOCOCCUS SUBTILIS (Kütz.) Klerck. 10021. 10110. 10111 (various growth forms). 10112. 10128. 10157. 10163. 10186 in part. 10282. 10316 in part. On brick, concrete and bone in shade. On rock ledge in wet to dry water courses in the canyon. On damp ground, old roadway and ball diamond.

STIGEOCLONIUM LUBRICUM (Dillw.) Kütz. 10040 in part. 10042. 10043. 10295. Amidst rocks in shallow water. In a brooklet.

SYMPLOCA MUSCORUM Gom. 10055. 10117. Covering moss on damp canyon wall. On moss and grass roots at river's edge.

TETRASPORA GELATINOSA (Vauch.) Desv. 10087. Gelatinous masses in a spring.

TREBOUXIA CLADONIAE (Chod.) G. M. Smith. 10181. In damp shade on ledges and base of tree trunks.

TRENTEPOHLIA AUREA (L.) Martius. 10053. 10280. A rusty fuzz on shaded canyon walls.

TRIBONEMA BOMBYCINUM (Ag.) Derb. & Sol. 10005. 10017. In slow shallow water.

ULOTHRIX ZONATA (Web. & Mohr) Kütz. 10000. 10004. 10011. 10019. 10020. 10027. 10041 in part. 10045. 10069. 10083. 10085. 10091. 10092. 10096. 10097. 10098. 10099. 10103. 10226. 10247 in part. On rocks etc. in brooks and rivers.

UROCOCCUS INSIGNIS Berk. & Hass. 10059. Green spots on the sides of a rock-ledge pool.

UROCOCCUS HOOKERIANUS Berk. & Hass. 10259. Surface of a ledge below waterline.

VAUCHERIA GEMINATA (Vauch.) DC. 10023. 10078. 10082. 10200. 10201 in part. 10235. 10252. In a brooklet. In the water hole of a pasture. Matted on grass in a spring. In slow shallow river water.

VAUCHERIA SESSILIS (Vauch.) DC. 10115. 10135. 10155. 10300. In slow shallow river water. On wet gravel in hillside seepage. On wet sandy ground in the shade.

VAUCHERIA TERRESTRIS (Vauch.) DC. 10125. 10129. On shady damp ground.

GRAND FALLS, NEW BRUNSWICK, and the
CHICAGO NATURAL HISTORY MUSEUM